

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

**"APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2**

**APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2"**

TO: DIRECTOR, CIA  
FROM: T. G. Dingach, Jr.  
SUBJECT: [illegible]

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

64500 (2204 only)  
9.3270

81376  
S/100/60/000/006/009/013  
A169/A026

AUTHOR: Yetrukhin, N.N.

TITLE: The Effect of the Phase Jump on the Signal Distortion<sup>8</sup> in a Voice-Frequency Telegraph Channel With Frequency Modulation

PERIODICAL: Elektrosvyaz<sup>1</sup>, 1960, No. 6, pp. 50'- 53

TEXT: The author discusses the effect of a phase jump on distortions in a FM voice-frequency telegraph channel. Such phase jumps are caused by various switching operations, e.g., when switching from the basic carrier frequency generator to the reserve generator, etc. Experimental measurements performed at TsNIIS of the USSR Ministry of Communications by V.A. Biryukov and M.B. Rabinovich showed that phase jumps cause additional distortions in AM and FM voice-frequency telegraphy channels. The author derives the dependence of the telegraphy pulse distortions on the magnitude of the phase jump in a channel. Formula (12) produces results which are somewhat lower than those obtained by experiments because of the assumptions made in deriving it. Based on experimental data, the author introduces corrections; thus, the formula for determining the magnitude of distortion appears in the following form:

Card 1/3

84376

3/106/60/000/006/009/013

A169/A026

The Effect of the Phase Jump on the Signal Distortion in a Voice-Frequency Telegraph Channel With Frequency Modulation

$$D = \frac{\sin \Delta\varphi}{1 + \cos \Delta\varphi} \frac{0.2B \cdot 100\%}{\Delta f} \quad (14)$$

where B - speed of telegraphy (in baud);  $\Delta\varphi$  - phase jump;  $\Delta f$  - frequency deviation; [Abstracter's note: D (distortion) is a translation of the letter И (iskazheniye) in the original.] Graphs calculated with this formula (Fig. 2) and experimental data are compared. At  $\Delta\varphi < 80^\circ$ , a satisfactory coincidence between calculated and experimental values is observed. At  $\Delta\varphi > 80^\circ$ , the measured values rise rapidly to 100%, thus the formula does not hold in this range. The formula shows that the magnitude of the distortion depends on the frequency deviation, but is independent of the channel bandwidth. In his conclusions, the author points out that the phase jump in an FM voice-frequency telegraphy channel causes a displacement of the front of the frequency transient process. The distortion of the telegraphy pulses increases from 0 to 100% when a phase jump changes from 0 to  $180^\circ$ . In comparing the effects of a phase jump on AM and FM channels, it was found that, in case there are no adjacent channels, the FM voice-frequency channels are more sensitive to phase jumps than AM channels, if the magnitude of

Card 2/3

84376


S/106/60/000/006/009/013

A169/A026

The Effect of the Phase Jump on the Signal Distortion in a Voice-Frequency Telegraph Channel With Frequency Modulation

the phase jump is small. Preliminary measurements show that AM and FM channels are about equally sensitive, if there are adjacent channels. The presence of adjacent channels causes additional distortions during phase jumps. The investigation of these additional distortions will be the subject of another paper. There are 3 figures and 4 references: 2 German and 2 Soviet.

SUBMITTED: January 19, 1960



Card 3/3

Gurov, V.S.; YETRUKHIN, N.N.; RABINONOVICH, M.B.; TARAKANOVA, M.S.,  
otv. red.; SVERDLOVA, I.S., red.; SHEFER, G.I., tekhn. red.

[Voice-frequency telegraphy systems] Sistemy tonal'nogo tele-  
grafirovaniia; informatsionnyi sbornik. Moskva, Sviaz'izdat,  
1962. 205 p. (MIRA 15:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut svyazi Mi-  
nisterstva svyazi SSSR (for Gurov, Yetrukin, Rabinovich'.  
(Telegraph)

YETS, A. G.

Duodenum - Diseases

Duodenal stasis. Sov. med. 16 No. 4, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, SEPTEMBER 1952. UNCLASSIFIED.

YETS, A.G.

Perforation of the gall bladder by Ascaris. Vest.khir. 73 no.4:52 J1-A; '53.  
(MLRA 6:3)

1. Kafedra obshchey khirurgii Yaroslavskogo meditsinskogo instituta.  
(Gall bladder--Diseases)

YETS, A.G., kandidat meditsinskikh nauk; SHARINA, S.A.

Use of phytoncides in suppurative diseases in ambulant patients.  
Sov.med.18 no.3:26-28 Mr '54. (MLRA 7:2)

1. Iz kliniki obshchey khirurgii Yaroslavskogo meditsinskogo  
instituta. (Phytoncides) (Suppuration)

YETS, A. G.

YETS, A.G., kandidat meditsinskikh nauk (Yaroslavl')

Torsion of the gallbladder. Klin. med. 32 no.5:77-78 My '54.  
(MIRA 7:7)

1. Iz kafedry obshchey khirurgii (zav. prof. S.G. Buskosuyev)  
Yaroslavskogo meditsinskogo instituta.  
(GALLBLADDER, diseases,  
\*torsion)

YETS, A.G. Kandidat meditsinskikh nauk

Use of phytoncides in some suppurative processes. Khirurgiia no.6:  
62-64 Ja '55. (MLRA 8:10)

1. Iz kliniki obshchey khirurgii (zav.kafedroy- prof. S.G. Rukosuyev) Yaroslavskogo meditsinskogo instituta.  
(PHLEGMON, ther.  
phytoncides)  
(PLANTS,  
phytoncides, ther. of phlegmon)

YETS, A.G., dotsent

Wound of the internal mammary artery, pericardium and lung.  
Vest.khir. 75 no.6:119-120 J1 '55. (MIRA 8:10)

1. Iz kliniki obshchey khirurgii (zav.-prof. S.G. Rukosuyev)  
Yaroslavskogo meditsinskogo instituta Yaroslavl', ul.Stachek  
d. 51, kv.8.

(CHEST--WOUNDS AND INJURIES)

YETS, A.G., kandidat meditsinskikh nauk.

Phytoncide therapy in acute appendicitis. Vest.khir.76 no.10:  
64-66 N '55. (MLRA 9:1)

1. Iz kliniki Obshchey khirurgii (zav.--prof. S.G.Rukosuyev)  
Yaroslavskogo meditsinskogo instituta.

(APPENDICITIS,

acute, phytoncide ther.)

(PLANTS

phytoncides, ther. in acute appendicitis)

POPKOVA, N.F.; YETS, A.G.; KLETSKIN, S.Z.

Effect of an onion-garlic extract on pus-forming bacteria.  
Zhur. mikrobiol., epid. i immun. 27 no.1:105-106 Ja '56, (MLBA 9:5)

1. Iz kafedry mikrobiologii (sav.-prof. D.F. TSimbalist) i kafedry  
obshchey khirurgii (sav.-prof. S.G. Rukosuyev) Yaroslavskogo  
meditsinskogo instituta (dir.-prof. N.Ye. Yarygin)

(GARLIC,

extract of garlic & onion, eff. on pus-forming bacteria  
(Rus))

(VEGETABLES,

onion, extract of onion & garlic, eff. on pus-forming  
bact. (Rus))

(BACTERIA,

pus-forming, eff. of onion & garlic extract (Rus))

YETS, A.G., dotsent; VASILEVSKIY, I.I.

Subcutaneous injury of the biceps brachii. Ortop., travm. i protez.  
18 no.2:58-59 Mr-Ap '57. (MLRA 10:8)

1. Iz kafedry obshchey khirurgii (i.o. zav. - dotsent G.A.Dudkevich)  
Yaroslavskogo meditsinskogo instituta  
(SHOULDER--WOUNDS AND INJURIES)

751-2487  
YETS, A.G.; VASILEVSKIY, I.I.; ZEMINA, S.I.

Acute appendicitis in children. *Pediatrics* no. 4:86 Ap '57.  
(MIRA 10:10)

1. Iz kliniki obshchey khirurgii Yaroslavskogo meditsinskogo  
instituta i detskoy bol'nitsy imeni N.A.Semashko. Yaroslavl'.  
(APPENDICITIS)

YETS, A.G., dotsent; SANDLER, A.G., ordinator; SHARINA, S.A., ordinator

~~Phytoncide-novocaine~~ block in acute suppurative and inflammatory diseases in ambulatory practice. Sov.med.21 no.3:112-114 Mr '57.  
(MLRA 10:7)

1. Iz kafedry obshchey khirurgii Yaroslavskogo meditsinskogo instituta (zav, kafedroy - prof. S.G.Rukosuyev)

(FURUNCULOSIS, ther.

phytoncide-procaine blockade)

(PLANTS

phytoncide-procaine blockade in furunculosis)

(SWEAT GLANDS, dis.

hidradenitis, ther., phytoncide-procaine blockade)

(PROCAINE, ther. use

phytoncide-procaine blockade in furunculosis & hidradenitis)

VETS, A. G.

VETS, A.G., dots.; VASILEVSKIY, I.I. (Yaroslavl')

Gastric tetany. Klin.med. 35 no.11:142-144 N '57. (MIRA 11:2)

1. Iz kliniki obshchey khirurgii (zav. - dotsent G.A.Dudkevich)  
Yaroslavskogo meditsinskogo instituta.  
(TETANY, etiol. and pathogen.  
peptic ulcer, surg.)  
(PEPTIC ULCER, compl.  
tetany, surg.)

*YETS, R.G.*

YETS, A.G., dotsent (Yaroslavl', ul. Stachek, d.51, kv.8); ORIGOR'YEV, V.A.

Torsion of the gall bladder. Vest.khir. 79 no.8:122-123 Ag '57.  
(MIRA 10:10)

1. Iz kliniki obshchey khirurgii (zav. - prof. S.G.Rukosuyev)  
Yaroslavskogo meditsinskogo instituta.

(GALL BLADDER, dis.

torsion, clin. aspects & management)

YETS, A.G., dotsent, KORZINA, T.A.

Bilateral protrusio acetabuli. Ortop.travm. 1 pratez 19 no.2:68-69  
Mr-Ap '58 (MIRA 11:5)

1. Iz kliniki obshchey khirurgii (zav. - i.o. dots. G.A. Dudkevich)  
Yaroslavskogo meditsinskogo instituta (dir. - prof. N.Ye Yarygin).  
(ACETABULUM, abnorm.  
bilateral protrusion (Rus))

YETS, A.G., dots.; GRIGOR'YEV, V.A.

Duodenal and upper jejunal phlegmon. Khirurgia 34 no.9:99-100  
S '58. (MIRA 12:4)

1. Iz kafedry obshchey khirurgii (zav. - dots. G.A. Dudkevich) Yaroslavskogo meditsinskogo instituta.  
(PHLEGMON)

YETS, A.G., dots. (Yaroslavl', ul. Stachek, d. 51, kv. 8); SANDLER, A.G.

Wounds of the subclavian vein. Vest.khir. 81 no.11:119  
N '58. (MIRA 12:3)

1. Iz kliniki obshchey khirurgii (sav. - prof. S.G.Rukosuyev)  
Yaroslavskogo meditsinskogo instituta.  
(SUBCLAVIAN VEIN--WOUNDS AND INJURIES)

YETS, A.G., dots.; GRIGOR'YEV, V.A.

Blood vessels injury in peacetime. Ortop.travm. i protez. 20 no.2:  
60-61 F '59. (MIRA 12:12)

1. Iz kafedry obshchey khirurgii (zav. - prof. S.G. Rukosuyev) Yaroslavskogo meditsinskogo instituta.

(BLOOD VESSELS, wounds & inj.  
peacetime inj. (Rus))

YETS, A.G., dotsent; VASILEVSKIY, I.I.

Gastric tetany. Vest.khir. 83 no.12:84-86 D '59. (MIRA 13:5)

1. Iz kliniki obshchey khirurgii (zav. -- dotsent G.A. Dudkevich)  
Yaroslavskogo meditsinskogo instituta. Adres A.G. Yets: Yaroslavl,  
Meditsinskiy institut.

(TETANY)

(STOMACH--DISEASES)

YETS, A.G., dotsent; HUKAVISHNIKOVA, V.I.; BOLDIN, K.M.

Surgical treatment of acute and subacute thrombophlebitis of the  
dermal veins of the lower extremities. Sov.med. 24 no.1:127-130  
Ja '60. (MIRA 13:5)

1. Iz kliniki obshchey khirurgii (nav. - dotsent G.A. Dudkevich)  
Yaroslavskogo meditsinskogo instituta.  
(THROMBOPHELEBITIS surgery)  
(LEG blood supply)

YETS, A.O., dotsent; GRIGOR'YEV, V.A.

Torsion of the spleen. Vest.khir. 85 no.11:130-131 N '60.  
(MIRA 14:2)

1. Iz kafedry obshchey khirurgii (zav. - dotsent G.A. Dudkevich)  
Yaroslenskogo meditsinskogo instituta. Adres avtora: Yaroslavl',  
ul. Yem. Yaroslavskogo, d.67, kv.22).  
(SPLEEN—DISEASES)

YETS, A.G., dotsent; GUTMAN, Ye.S.

Problem of pelvic abscesses. Khirurgiia 37 no.3:60-61 Mr '61.  
(MIRA 14:3)

1. Iz kliniki obshchey khirurgii (zav. - dotsent G.A. Dudkevich)  
Yaroslavskogo meditsinskogo instituta.  
(~~PELVIS~~—ABSCESS)

YETS, A. G., dotsent; BOLDIN, K. M.

Closed injuries of the biceps brachii. Ortop., travm. i protez.  
no.1:75-76 '62. (MIRA 15:2)

1. Iz kliniki obshchey khirurgii (zav. kafedroy - dots. G. A. Dudkevich) Yaroslavskogo meditsinskogo instituta i khirurgicheskogo otdeleniya (zav. - K. M. Boldin) medsanchasti kombinata "Krasnyy Perekop".

(AFM--WOUNDS AND INJURIES)

YETS, A.G., dotsent; DUDKEWICH, G.A., dotsent; ANDREYEV, B.I.

Surgical treatment of acute cholecystitis. Sov. med. 27 no.11:  
74-78 II '63 (MIRA 18:1)

1. Iz kliniki obshchey khirurgii Yaroslavskogo meditsinskogo  
instituta.

YETS, A.G.; DUDKEVICH, G.A.; ZIL'BERBORD, B.Sh.; BORSHCHEVSKAYA, V.A

Potential local anesthesia in thyrotoxic goiter surgery. Sov. med.  
28 no.4:45-48 Ap '64. (MIRA 17:12)

1. Klinika obshchey khirurgii (zav. - dotsent G.A. Dudkevich)  
Yaroslavskogo meditsinskogo instituta.

YETVEYEN, M., PETERZHAK, M., and GRIBINSKY, A., AS USSR, Moscow

"Research on the Oxalates of Uranium (IV) and Thorium," a paper submitted  
at the 16th International Congress of Pure and Applied Chemistry, Paris, 1964  
July 1967.

GONCHAREVA, T.S.; SALIVON, Ye.F.; SLYUSARENKO, I.T.; GORODETSKAYA, P.M.;  
YEVALENKO, N.S.

Effect of trace elements (zinc, manganese, cobalt) on growth and  
metabolic processes in BCG cultures. Zhur.mikrobiol., epid. i immun.  
32 no.3:70-75 Mr '61. (MIRA 14:6)

1. Iz Kiyevskogo instituta epidemiologii i mikrobiologii.  
(TRACE ELEMENTS) (MYCOBACTERIUM TUBERCULOSIS)

SHAKHKAMYAN, L.; YEVANGULOV, A.

Current issue of the collection of scientific and technical  
publications. Reviewed by L.Shakhamian, A.Evangulov.  
Prom.Arm. 5 no.2:70-72 F '62. (MIRA 15:2)  
(Armenia--Technology--Information services)

YEVANGULOV, A.

Promoters of innovations. Prom.Arm. 4 no.10:4E.51 0 '61.  
(MIRA 14:11)

(Erivan--Rubber industry)

YEVANGULOV, A., inzh.; ISAYAN, A., inzh.

How mechanic Erdzhanik Akopian became foreman without leaving  
his working place. Izobr. i rats. no.4:7 '63. (MIRA 16:7)

(Erivan---Compressors)

YEVANGULOV, B. B.

ANIKHEYEV, N.P., glavnyy red.; BISKE, S.F., red.; BOBYLEVSKIY, V.I., red.;  
 VAS'KOVSKIY, A.P., red.; VERESHCHAGIN, V.N., red.; DRABKIN, I.Ye.,  
 red.; YEVANGULOV, B.B., red.; YEFIMOVA, A.F., red.; ZIMKIN, A.V.,  
 red.; LARIN, H.I., red.; LIKHAREV, B.K., red.; MENNER, V.V., red.;  
 MIKHAYLOV, A.F., red.; NIKOLAYEV, A.A., red.; POPOV, G.G., red.;  
 POPOV, Yu.N., red.; SAKS, V.N., red.; SEMEYKIN, A.I., red.;  
 SIMAKOV, A.S., red.; TITOV, V.A., red.; SHILO, N.A., red.; EL'YANOV,  
 M.D., red.; YAKUSHEV, I.R., red.; V redaktirovani primarni uchast-  
 tiye: ANDREYEVA, O.N., red.; BAYKOVSKAYA, T.N., red.; BOLKHOVITINA,  
 N.A., red.; BORSUK, M.O., red.; VASIL'YEV, I.V., red.; VASILEVSKAYA,  
 N.D., red.; VOYEODOVA, Ye.M., red.; YEVSEYEV, K.P., red.; KIPARI-  
 SOVA, L.D., red.; KRASNIY, L.I., red.; KRISHTOPOVICH, L.V., red.;  
 KULIKOV, M.V., red.; LIBROVICH, L.S., red.; MARKOV, F.G., red.;  
 MODZALEVSKAYA, Ye.A., red.; NIKIFOROVA, O.I., red.; OBUT, A.M.,  
 red.; PCHELINTSEVA, G.T., red.; RZHONSNITSKAYA, M.A., red.; SEDOVA,  
 M.A., red.; STEPANOV, D.L., red.; TIMOFEYEV, B.V., red.; KHUDOLBY,  
 K.M., red.; CHEMEKOV, Yu.F., red.; CHERNYSHEVA, N.Ye., red.;  
 DERZHAVINA, N.G., red. izd-va; GUROVA, O.A., tekhn. red.

(Continued on next card)

• ANIKYEV, N.P.--(continued) Card 2.

[Decisions of the Interdepartmental Conference on the Unified  
Stratigraphic Columns of the Northeastern Part of the U.S.S.R.]  
Reshenia Mezhdedomstvennogo soveshchaniia po razrabotke unifitsi-  
rovannykh stratigraficheskikh skhem dlia Severo-Vostoka SSSR,  
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr,  
1959. 65 p. (MIRA 13:2)

1. Mezhdedomstvennoye soveshchaniye po razrabotke unifitsirovannykh  
stratigraficheskikh skhem dlya Severo-Vostoka SSSR, Magadan, 1957.  
(Soviet Far East--Geology, Stratigraphic)

YEVANGULOV, B.B.

Equipment for loading and hoisting loose rock in the process  
of vertical shaft sinking. Biul. TSINCHAI no.5:44 '61.  
(MIRA 14:10)

(Shaft sinking—Equipment and supplies)

SAL'YE, Yevgeniy Aleksandrovich, dots.; GOTS, Anatoliy Semenovich,  
gornyy inzh.; YEVANGULOV, Boris Bagdasarovich, dots.;  
BOKIY, O.B., red.

[Organization and planning of geological prospecting] Or-  
ganizatsiia i planirovanie geologorazvedochnykh rabot.  
Moskva, Nedra, 1965. 297 p. (MIRA 19:1)

KATS, Samuil Mikhaylovich; YEVANGULOV, L.B., red.; BUL'DYAYEV, N.A.,  
tekhn. red.

[Balance-type dynamometers for measuring torque] Balansirnye  
dinamometry dlia izmereniia vrashchaiushohego momenta. Moskva,  
Gosenergoizdat, 1962. 142 p. (MIRA 16:1)  
(Dynamometer)

YEVANGULOV, S.N., gornyy inzh.

Repeated use of metal supports in mines. Ugol' Ukr. 4  
no.8:39-40 Ag '69. (MIRA 13:9)

1. Kombinat Stalinugol'.  
(Donets Basin--Mine timbering)

YEVANGULOVA, Y.E.P.

Kontrol' kachestva poverkhnostnoi zakalki (Quality control of surface hardening). Pod red.  
A.A. Fogelia. Moskva, Mashgiz, 1954. 31 p. (B-ka vysokochastotnuka-termista, no. 5)

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

GOLOVIN, G.F.; YEVANGULOVA, Ye.P.

Determination of the depth and quality of the hardened layer  
in high frequency hardening. Zav.lab. 21 no.2:190-193 '55,  
(MLRA 8:6)

1. Nauchno-issledovatel'skiy institut tokov vysokoy chastoty  
imeni V.P. Vologdina  
(Steel--Hardening)

SOV/137-58-12-25234

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 170 (USSR)

AUTHORS. Zamyatnin. M. M., Yevangulova, Ye. P.

TITLE Properties of Bearing Steel Quench-Hardened Upon Heating by a High-frequency Current (Svoystva podshipnikovoy stali, zakalennoy s nagrevom tokom vysokoy chastoty)

PERIODICAL. V sb.. Prom primeneniye tokov vysokoy chastoty. Riga, 1957, pp 134-144

ABSTRACT Comparative investigation of the effect of through hardening of a specimen with high-frequency current (HH) at 8 kcycles on the mechanical properties of ball-bearing steels of ShKh15 and ShKh15 SG grades.  $R_c$  as well as  $\sigma_{bsf}$ ,  $\sigma_{piz}$ ,  $\sigma_{biz}$ , the ultimate strength in torsion  $\tau_b$ , the torsional angle during failure  $\phi$ ,  $a_k$  (on cylindrical specimens 12 mm in diam without notching) and fretting fatigue were studied. The main characteristics of the HH process are the rate of heating to above  $T_c$  and the heating temperature. All specimens were quenched in transformer oil. The specimens were subjected to HH from 910-920, 940-950, and 970-980° temperatures. It is shown that HH produces structures and mechanical properties slightly

Card 1/2

SOV/137-58-12-25234

Properties of Bearing Steel Quench-Hardened Upon Heating by a High-frequency (cont )

different from those existing after the usual quench-hardening. An appreciable increase in the heating temperature is required to attain optimum results from HH. With an initial structure of fine-grain pearlite and a rate of heating of  $\sim 10^{\circ}\text{C}/\text{sec}$  the best results for both grades of steel are obtained upon heating to  $940-960^{\circ}$  instead of to  $830-850^{\circ}$  when heating is done in a furnace. Bibliography 5 references.  
L. F

Card 2/2

YEVANGULOVA, Yevgeniya Pavlovna; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPIRISIN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; MIKHAYLOV-MIKHEYEV, P.B., doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiiy redaktor.

[Quality control of surface hardening] Kontrol' kachestva pe-verkhnostnoi zakalki, Izd. 2-ee, ispr. i dop. Pod.red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 33 p.(Bibliotekha vysokochastotnika-termista, no5] (MIRA 10:6)

(Metals--Hardening) (Quality control)

GOLOVIN, G. F., kand.tekhn.nauk; YEVANGULOVA, Ye.P., inzh.

Hardening of gears using a two-frequency low-power electric  
generator. Trudy NIITVCH no.4:55-63 (MIRA 17:7)

YEVANGULOVA, Ye.P.; COLOVIN, G.F.

Induction heat treatment of reinforcement steel. Stal' 24 no. 6:  
538-540 Je '64. (MIRA 17:9)

YEVANGULOVA, Ye.P.; GREKOV, N.A., inzh., retsenzent; FOGEL', A.A.,  
kand. tekhn. nauk red.

[Quality control of surface hardening] Kontrol' kache-  
stva poverkhnostnoi zakalki. Izd.3., ispr. i dop. Pod red.  
A.A.Fogelia. Moskva, Mashinostroenie, 1965. 46 p.  
(Bibliotekha vysokochastotnika-termista, no.5)  
(MIRA 19:1)

YEVANKO, S.K., starshiy tekhnolog; DYUBIN, Yu.N., stakhanovets elektro-  
svarechik.

Electric arc welding of aluminum. Proizv.-tekh.indorm. no.8:26-36  
'53. (MIRA 10:3)  
(Aluminum--Welding)

YEVAROVICH M. A.,

PA 172T46

USSR/Medicine - Spectrography,  
Pharmacological

44p/Oct 50

"Problem of Applying the Styloscope in Standard-  
ization of Medical Preparations," M. A. Yevarovich,  
Moscow Inst of Phar

"Iz Ak Nauk SSSR, Ser Fiz" Vol XIV, No 5, pp 683,684

Describes application of spectral analysis to  
medical compd according to legal requirements.

172T46



**"APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2**

**APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2"**

YEVBATUROV, A.S., inzh.

Vibration tool for making concrete border stones in series, Bnl.  
tekh. inform. 4 no.2:20-22 F '58. (MIRA 11:3)  
(Vibrators) (Concrete blocks)

*Yevchenko, A.A.*

SUBJECT: USSR/Welding

135-4-13/15

AUTHOR: Yevchenko, A.A., Engineer.

TITLE: Restoring Pneumatic Chisels by Surfacing (Vosstanovleniye pnevmaticheskogo udarnogo instrumenta metodom naplavki).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 4, pp 27-28, (USSR)

ABSTRACT: According to technical regulations, pneumatic chisels are to be made of steel "6XC", or of steel "Y7" as replacement. The author's plant used the steel "Y7" which was not sufficiently durable. A method was tried and found satisfactory for restoring worn chisels by surfacing with electrodes "M-16" which give the following analysis of surfacing metal: 0.3-0.4% C; 10.5-13.5% Cr; 3-3.5% W; 0.6-0.9% V; 1-1.6% Si; 0.45% Mn. The composition of their coating is: marble 30%; feldspar 27%, ferrotungsten 15%, ferrovanadium 4.5%, ferrotitanium 15%, ferrosilicon 4%, caolin 4%, graphite 0.5%, water glass 45-52% of the total dry compound weight. Welding is done with d.c. of reverse polarity, with 130-160 a. The electrode diameter is 3-5 mm. The subsequent heat treatment consists in annealing at 840-860°C; oil hardening at 1050-1100°C; tempering at

Card 1/2

TITLE:

Restoring Pneumatic Chisels by Surfacing (Vosstanovleniye  
pnevmaticheskogo udarnogo instrumenta metodom naplavki);  
320-560°C.

135-4-13/25

The restored tools serve 2-3 times longer than the original ones.  
The plant's yearly economy on tool steel amounts to 1 ton.

ASSOCIATION: Not stated.

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

YEYCHENKO, Aleksey Nikolayevich, brigadir; KAL'NITSKIY, R.Ya.  
[Kal'nyts'kyi, R.IA.], red.

[Following the example of Vladimir Svetlichnyi] Za pry-  
kladom Volodymyra Svitlychnoho. Kharkiv, Kharkivs'ke  
knyzhkove vyd-vo, 1963. 25 p. (MIRA 18:10)

SOV/137-59-1-326

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 40 (USSR)

AUTHORS: Pischikov, M. M., Yevchenko, G. I.

TITLE: On the Use of Oxygen Blast at the Chelyabinsk Metallurgical Plant  
(K voprosu o primenenii kisloroda na ChMZ)

PERIODICAL: Tekhn.-ekon. byul. Sov. nar. kh-va Chelyab. ekon. adm. r-na,  
1958, Nr 1, pp 12-14

ABSTRACT: It is stated that O<sub>2</sub> blast on open-hearth furnaces of the Chelyabinsk Metallurgical Plant was first employed during October, 1947. The productivity of the open-hearth furnaces was increased only some 3 to 4%, which must be attributed to a lack of diligent organization of the work. A number of measures designed to improve the organization are proposed.

M. P.

Card 1/1

YEVCHENKO, G.I.; TEREENT'YEV, M.V.

Increasing the output of open-hearth furnaces. Metallurg 8 no.4:16-17  
Ap '63. (MIRA 16:3)

(Open-hearth furnaces—Maintenance and repair)

AUTHOR: Yevchenko, G.I.

SOV/130-58-7-4/35

TITLE: In Fifteen Years (Za pyatnadtsat' let)

PERIODICAL: Metallurg, 1958, Nr 7, pp 10 - 11 (USSR).

ABSTRACT: The author briefly describes the rapid construction during the war of the Chelyabinsk Metallurgical Works and goes on to outline its growth in the fifteen years since then. He mentions that the blast furnaces now operate with high top-pressure and constant humidity blast and with up to 50% fluxed sinter, while oxygen is used in the blast in ferrosilicon smelting. Better open-hearth practice has enabled steel production in Nr 1 shop to be increased by 30% between 1955 and 1957. In 12 years, electric steel production has risen by a factor of 2.7, oxygen being used. In the rolling mills, mechanisation has been widely introduced and the range and quality of rolled products has been improved. For the period 1958 - 65, it is planned that pig iron, steel and rolled-product production should increase by factors of 2.5, 2.9 and 3, respectively. The largest blast furnace in the USSR is to be built, to work with 100% sinter; 30-ton electric furnaces and oxygen-blown converters are to be provided for duplexing;

Card 1/2

In Fifteen Years

SOV/130-58-7-4/35

and three more section mills as well as a heat-treatment  
and roll shop are to go into operation.  
There are 3 figures.

ASSOCIATION: Chelyabinskiy metallurgicheskiy Kombinat  
(Chelyabinsk Metallurgical Combine)

Card 2/2      1. Steel industry--USSR    2. Steel --Processing    3. Industrial  
plants--USSR

YEVCHENKO, S.Ye.

Measuring horizontal angles on first-order triangulation points  
with long base lines. Geod. i kart. no.9:21-24 Ag '65. (MIRA 18:9)

SEVITSKAYA, S.; YEVCHENKOVA, Ye.; MISLAVSKAYA, P.; SAKHAROVA, K.

Prolonging the life of lead storage batteries. Avt. transp.  
34 no.10:16-18 O '56. (MLRA 9:12)

(Storage batteries)

BABAYEVA, L.; PANKRATOVA, M.; YEVCHENKOVA, Ye.; SELITSKAYA, S.

Conservation of storage batteries at low temperatures. Avt.transp.  
38 no.10:20-21 0 '60. (MIRA 13:10)  
(Motor vehicles--Batteries)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

ACCESSION NO:

AE991279

RTA: 766, 746, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

formed during the vulcanization

the mixture US-2 and SBR-40

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

**"APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2**

**APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2"**



**CIA-RDP86-00513R001962920019-2**

1991-1992 2000-2001

445

11

## CONCLUSIONS

**CIA-RDP86-00513R001962920019-2"**

YEVDAR, A.A.

A special internal-surface slotter. Stan. 1 instr. 26 no.8:13-14  
Ag'55. (MLRA 8:12)

(Machine tools)

YKVDK, A.A.

High speed gear-cutting machines. Stan.1 instr. 27 no.10:21-23  
0 '56. (Gear-cutting machines) (MLRA 9:12)

YEVDAR, A.A.

Design and manufacture of threaded guides used in gear-shaping  
machines. Vest.mash. 38 no.10:67-69 0 '58. (MIRA 11:11)  
(Gear-cutting machines)

L 16611-63

EWT(1)/EWT(m)/ES(j)/BDS AFPTC/AFMDC/ASD AE/E

S/238/63/009/002/003/003

AUTHOR: Ievdakimov, I. R.

57

56

TITLE: The rate of propagation of ultrasonic vibrations in blood in the course of radiation sickness

PERIODICAL: Fiziologicheskyy zhurnal Akademii nauk U.S.S.R., v. 9, no. 2, 1963, 251-255

TEXT: The study of changes in the rate of propagation of ultrasonic waves in the source of acute radiation sickness is of interest. This investigation, therefore, was involved in the study of such phenomenon. A commercial apparatus IS-2A designed for physico-chemical control of continuous flowing liquids in plant and laboratory conditions was used for measuring the velocity of ultrasonic waves. The study was conducted on dogs in which an acute radiation sickness was induced by x-ray irradiation in doses of 600 r. It was found that continuous changes in the velocity of ultrasonic waves in blood of irradiated animals took place. The phases of these changes coincide with periods of propagation of the acute radiation sickness. Two types of changes in the velocity of sound in blood were found. The first change was observed in dogs with intermediate intensity of radiation sickness, which is characterized by the presence of two maxima in the velocity of sound on the background of its total lowering. One of the maxima can be referred to as latent period, and

Card 1/2

L 16611-63

The rate of propagation .....

5/238/63/009/002/003/003

the second to the beginning of the period of clinical symptoms of acute radiation sickness. The second type of changes was noted during the most intense radiation sickness. In these animals the maximum velocity of propagation of ultrasonic vibrations in blood coincided with the beginning of the period of clinical symptoms of sickness. The rate of propagation of ultrasound in blood was found to be dependent on the erythrocyte count and the hemoglobin content. A complete quantitative correlation of this fact could not, however, be established. There are 2 figures and a 6-item bibliography.

ASSOCIATION: Laboratoriya biofizyky Institutu fiziologii im. O. O. Bohomolitsya  
Akademii Nauk USSR (Laboratory of Biophysics, Institute of Physiology  
im. Bohomolets, Academy of Sciences of the Ukrainian SSR), Kiev.

SUBMITTED: December 29, 1962

Card 2/2

YEVDKOV, A.; KLINKOVSHTEYN, I.

Seven hundred thousand kilometers without major overhaul. Avt.  
transp. 33 no.12:16 D '55. (MLRA 9:3)  
(Leningrad--Motorbus drivers)

YEVDAKOV, Aleksandr Aleksandrovich; VOYTEKO, Stanislav Pavlovich; VASIL'YEV,  
N.S., redaktor; MAL'KOVA, N.V., tekhnicheskly redaktor

[Master bus driving; work experience of leading drivers of the  
1st Leningrad bus depot] Masterstvo vozhdeniia avtobusov; iz opyta  
raboty peredovykh khóferov 1-ga avtobusnogo parka Leningrada. Mo-  
skva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1956. 49 p.  
(Motorbus drivers) (MLRA 10:4)

YEYDAKOV, A. A.

Significant measures for preventing accidents. Avt. transp. 35  
no.9:8 S '57. (MIRA 10:10)

(Traffic accidents)

YEVDAKOV, A.

Actions of production conferences. Avt. transp. 37 no.9:35-36  
S '59. (MIRA 12:12)  
(Transportation, Automotive)

YEVDAYOV, A.M., kand.biol.nauk

Pulmonary gas exchange in sheep of the Aral Sea region in summer  
and fall. Trudy Inst.eksp.biol. AN Kazakh. SSR 4:40-48 (MIRA 11:7)  
(KAZAKHSTAN--SHEEP--PHYSIOLOGY )  
(RESPIRATION)

YEVDAKOV, D.G., mashinist

Faults in the current limiting network of the main generator.  
Elek. i tepl. tiaga 5 no.5:38 My '61. (MIRA 14:7)

1. Depo Rubtsovka Tomskoy dorogi.  
(Diesel locomotives)

YEVDAKOV, P.V., provizor

Work practice of Rossosh' Pharmacy No. 48 of the Voronezh Section of  
the Main Pharmaceutical Administration. Apt.delo 6 no.4:40-42

Jl-Ag '57.

(MIRA 10:9)

(ROSSOSH'--PHARMACY)

YEVDKOV, P.V.

Experience in the work of the Rossosh' pharmacy No.48.  
Apt. delo 12 no.6:51-53 N-D '63. (MIRA 17:2)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	5
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

N. R. Khrushchev. (Ed. 1947-48). Cf. Contingency Plan.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

**"APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2**

**APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2"**

YEVDAKOV, V.P.

KOCHETKOV, N.K.; KUCHEROVA, N.F.; YEVDKOV, V.P.

Indole derivatives. Part 3: Synthesis of 6-oxy-1,2,3,4-tetrahydro-carbazole. Zhur. ob. khim. 27 no.1:253-257 Ja '57. (MIRA 10:6)

1. Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR.

(Carbazole)

(Urethans)

**"APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2**

**APPROVED FOR RELEASE: 03/15/2001**

**CIA-RDP86-00513R001962920019-2"**

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001962920019-2"

AUTHORS: Kucherova, N. F., Yevdakov, V. P., S07/79-28-7-53/64  
Kochetkov, N. K.

TITLE: Indole Derivatives (Proizvodnyye indola)V.The Synthesis of the  
Bis-Quaternary Ammonium Salts of Harmine (V.Sintez bis-chet-  
vertichnykh ammoniyevykh soley garmina)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 7,  
pp 1962 - 1967 (USSR)

ABSTRACT: The recently published articles on the physiological activity  
of the asymmetrical bis-quaternary ammonium salts (Refs 1-3)  
point to some prospects of these compounds with regard to new  
gangliolytic and hypotensive preparations (ganglioliticheskiye,  
gipotenzivnyye preparaty). For this reason the authors carried  
out the synthesis of some compounds of this group, using the  
accessible alkaloid harmine as initial product. The compounds  
obtained were of a certain interest as on the one hand just the  
bis-quaternary salts of the  $\beta$ -carboline proved to be more  
active, and on the other hand harmine itself displays hypotensive  
activity, as is known. The compounds of general type obtained  
are mentioned in scheme 1. Besides, the authors by the conversion

Card 1/3

Indole Derivatives. V. The Synthesis of the Bis-  
Quaternary Ammonium Salts of Harmine

SOV/79-28-7-53/64

of harmine with dibromethane synthesized the symmetrical bis-quaternary salt, the compound (VIII), as well as the mono-quaternary salts of harmine with benzylchloride, and the compound (IX). The synthesis of the asymmetrical bis-quaternary ammonium salts of the harmine series was carried out in two ways: 1) By the reaction of harmine with dialkylaminalkyl halides and a subsequent treatment of the reaction products with the halogen alkyl, and 2) by the reaction of harmine with  $\omega$ -halogen alkyl ammonium salts (yield 55-75%). The dependence of the hypotensive effect on the structure of these compounds is discussed. There are 7 references, 3 of which are Soviet.

ASSOCIATION: Institut farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR (Institute of Pharmacology and Chemotherapy of the Academy of Medical Sciences, USSR)

SUBMITTED: May 27, 1957  
Card 2/3

YEVDAKOV, V.P.

PHASE I BOOK EXPLOITATION

SOV/3494

Reaktsii i metody issledovaniya organicheskikh soyedineniy, Kn. 8 (Reactions and Research Methods of Organic Compounds, Bk. 8) Moscow, Goskhimizdat, 1959. 446 p. Errata slip inserted. 4,200 copies printed.

Eds (Title page): V.M. Rodionov, Academician (Deceased), B.A. Kazanskiy, Academician, I.L. Knunyants, Academician, M.M. Shenyakin, Academician, and N.N. Mel'nikov, Professor; Ed. (Inside book): V.P. Yevdakov; Tech. Ed.: V.F. Zazul'skaya.

PURPOSE: This book is intended for laboratory personnel at industrial plants, for instructors and students at higher educational establishments, and particularly for scientists and researchers working at the numerous research institutes in the Soviet Union.

COVERAGE: This is the eighth volume in a series "Reactions and Research Methods of Organic Compounds." This series does not duplicate the one published in English under the title "Organic Reactions" and appearing in Russian translation; however, some material, of particular interest, is included in this publication. The present series is primarily devoted to reviewing the works of Soviet chemists. The eighth volume of this series deals with thiocyanation

Card 1/5

Reactions and Research (Cont.)

SOV/3494

reactions of organic compounds and methods of studying them. It presents data on analytical methods using thiocyanates for the study of fats, mineral oils, and volatile oils. It discusses the use of thiocyanates for photographic emulsions, acceleration of rubber vulcanization, stabilization of lubricating oils, purification of tars, abatement of corrosion and purification of metals, production of mustard oil, and synthesis of sulfur-bearing compounds. It also discusses the use of thiocyanates as solvents for acrylonitrile polymers, as intermediate products in the synthesis of dyes, as antiseptics, bactericides, medicines, insecticides, and fungicides. The book contains 327 pages of tables listing 1449 initial organic compounds subjected to thiocyanation. The tables give formulas of the initial compounds, the names and structural formulas of the compounds, the reaction conditions, the reaction products and their yield percent as compared with the theoretical yield, as well as references to the literature on which the data are based. There are 797 references: 376 English, 228 German, 74 Soviet, 47 French, 17 Italian, 25 Japanese, 7 Polish, 7 Scandinavian, 3 Belgian, 8 Swiss, 1 Dutch, and 4 Hungarian.

Card 2/5

Reactions and Research (Cont.)

SOV/3494

TABLE OF CONTENTS:

1. Introduction	9
2. Synthesis of thiocyanates by the halide-for-thiocyano-group exchange reaction	13
Synthesis of alkyl thiocyanates	13
Synthesis of di- and polythiocyanate alkanes	16
Synthesis of aromatic thiocyanates	17
Reaction of thiocyanic acid salts with halide derivatives containing multiple bonds	19
Synthesis of thiocyanide alcohols and thiocyanide esters	20
Synthesis of thiocyanogen sulfide and thiocyanogen sulfon	23
Thiocyanide aldehydes and thiocyanide ketones	23
Thiocyanic acids and their derivatives	25
Thiocyanide amines	28
Synthesis of thiocyanogen alkyl silanes	29
Synthesis of heterocyclic compounds	29
Sulfophenyl halides and salts of hydrocyanic and thiocyanic acids	32

Card 3/5

Reactions and Research (Cont.)

SOV/3494

3. Thiocyanizing organic compounds with thiocyanic acid	33
Addition to unsaturated compounds	33
Substituting the hydroxyl group by thiocyanogen	34
4. Direct thiocyanizing of organic compounds	35
Thiocyanizing hydrocarbons	37
Thiocyanizing alcohols and phenols	39
Thiocyanizing ketones	42
Thiocyanizing carbonic acids	42
Thiocyanizing mercaptans	43
Thiocyanizing amines	43
Thiocyanizing heterocyclic compounds	46
Reaction of dithiocyanogen with elemental organic compounds	50
5. Synthesis of thiocyanides with cyanohalides, mercaptans and sulfides	50
6. Diazo method of synthesizing alkyl- and aryl thiocyanides	51
7. Examples of thiocyanizing organic compounds	53
Synthesis of thiocyanates by the exchange reaction of halides for the thiocyanic group	53

Card 4/5

Reactions and Research (Cont.)

SOV/3494

Preparation of thiocyanides by the interaction of salts of thiocyanic acid with dialkylsulfates and esters of sulfonic acids	54
Direct thiocyanizing of organic compounds	55
Diazole method of preparing thiocyanides	58
8. Review of literary data on thiocyanizing organic compounds	60
9. Supplements	376
10. Index of reaction products from thiocyanization of organic compounds	388
Bibliography	430
AVAILABLE: Library of Congress	

Card 5/5

TM/mfd  
6-6-60

5 (3)

AUTHORS:

Kucherova, N. F., Khomutov, R. M., SOV/79-29-3-34/61  
Budovskiy, E. I., Yevdakov, V. P., Kochetkov, N. K.

TITLE:

Synthesis of the Thioamide of the 2-Ethylisonicotinic Acid  
(Sintez tioamida 2-etilizonikotinovoy kisloty)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 915-919 (USSR)

ABSTRACT:

Recently the high chemotherapeutic activity of the thioamides of some heterocyclic acids was reported, in particular of the thioamide of the 2-ethylisonicotinic acid (Ref 1). This thioamide exceeds by its efficacy many other tuberculostatics against mycobacterium tuberculosis. The synthesis of the thioamide of 2-ethylisonicotinic acid described in publications (Ref 2) is too complicated (of several steps) and not suitable for a large-scale production. In the present paper a simpler synthesis of this thioamide according to the given scheme is described. The initial ethyl pyridine (I) synthesized according to reference 3 was oxidized with peracetic acid to give the N-oxide (II) which was transformed by nitration into compound (III). In the reduction of (III) the 2-ethyl-4-aminopyridine (IV) (90% yield) was formed. The bromide (V) was obtained by

Card 1/2

Synthesis of the Thioamide of the  
2-Ethylisonicotinic Acid

SOV/79-29-3-34/61

treating the perbromide of (IV) with sodium nitrite in concentrated hydrobromic acid (Ref 4). This reaction proceeded smoothly and gave a high yield in (V). For the transformation of (V) into the nitrile the former was heated with copper cyanide. The complex compound initially formed was decomposed by ammonia into compound (VI) (Yield 70%). The last step of the synthesis was the transformation of the nitrile (VI) into the thioamide of the 2-ethylisonicotinic acid (VII) which was obtained in crystalline form in high yield by the saturation of the solution (VI) in pyridine with hydrogen disulfide in the presence of triethylamine. In saltless state it is slightly soluble in water. There are 6 references, 1 of which is Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut farmakologii i khimioterapii  
(Scientific Research Institute of Pharmacology and  
Chemotherapy)

SUBMITTED: February 4, 1958

Card 2/2